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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,031	11/30/2001	Michael F. Angelo	1662-39900 JMH (P00-3100)	4706

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EXAMINER
LASHLEY, LAUREL L

ART UNIT	PAPER NUMBER
2132	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/010,031	ANGELO ET AL.
	Examiner	Art Unit	
	Laurel Lashley	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>20 December 2005</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-35</u> is/are pending in the application.

   4a) Of the above claim(s) ~~35 35 21~~ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,2,4-13 and 15-35</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This action is in response to amendments received 20 December 2005. Examiner

accepts amended claims 1, 12, 32 and 34, cancelled claims 3 and 14, and previously presented

claims 2, 4 – 13, 15 – 31, 33 and 35.

Response to Arguments

2.   Applicant's arguments with respect to claims 1 – 25 and have been considered but are

not persuasive. With regard to Applicant's argument (claim 1 and similar independent claim 12)

that Sudia does not teach two certificates containing digital signatures, used in which one

certificate is included in another certificate, Examiner respectfully disagrees. As depicted by

Sudia in Figure 5 and further detailed in column 9, lines 36 - 64, the user basic certificate with

issuers signature which is included in the authorization certificate having the sponsor's signature

is equivalent to applicant's first and second certificates, one certificate included within another

certificate. The certificates of Sudia are not just shown together but in fact one (user basic

certificate) is appended within another (authorization certificate) as in Figure 5, item 56.

Additionally, the Examiner believes appending and including to be synonymous thus achieving

the same results. This belief is substantiated by Apperson et al. in US Patent No. 5978484 (see

Figure 4 and column 6, lines 35 – 48), which discloses one certificate included ('appended' later

used) within another certificate.

With regard to Applicant's argument (claim 23) that no teaching or suggestion in

Tycksen of signing a hash that was computed from a signed certificate, Examiner respectfully

disagrees. The initial rejection of this claim is further substantiated in column 4, lines 7 – 8 of

Tycksen where Figure 1 is depicted as being signed and Figure 7 is the process by which the

said certificate is signed. Therefore the text as cited is retrieving a "signed" certificate.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1   22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sudia in US

Patent 5, 659,616 (hereinafter US '616).

As it pertains to claim 1, US '616 teaches:

A method of establishing a secured communication session across a remote network

connection, comprising (see Figure 5):

(a) receiving a first certificate (see column 9, line 38; basic key certificate) that includes a first

digital signature (see column 9, line 39 and Figure 5, item 55; sender's signature);

(b) obtaining a first public key (See Figure 5; where it is inherent that the public key is included

in the certificate has been sent);

(c) using the first public key to verify the first digital signature (see column 9, line 39);

(d) if the first digital signature in (c) is successfully verified, receiving a second certificate that

includes a second digital signature and that includes at least a portion of the first certificate (see

column 9, lines 43 and 54 – 55: where it is inherent that if authorization certificate is appended

to the basic key certificate then it must at least be a portion of the certificate);

(e) obtaining a second public key (see column 9, line 61; sponsor's public key); and

(f) using the second public key to verify the second digital signature (see column 9, line 60;

sponsor's signature).

For claim 2, US '616 teaches:

The method of claim 1 wherein said first and second digital signatures are signed with different

private keys (see column 16, lines 66 – 67 and column 17, lines 1 – 5: where it is inherent that if

private keys are self-confined then they must be different).

For claim 4, US '616 teaches:

The method of claim 1 wherein (c) includes decrypting a portion of said first certificate to recover

a first hash value (see column 12, lines 37 – 40).

For claim 5, US '616 teaches:

The method of claim 4 wherein (c) also includes computing a hash of at least a portion of said

first certificate to produce a first computed hash value (see column 12, lines 40 – 44).

For claim 6, US '616 teaches:

The method of claim 5 wherein said first hash value is compared to said first computed hash

value (see column 11, lines 31 – 34; where the hash matches).

For claim 7, US '616 teaches:

The method of claim 6 wherein (c) further includes determining said first digital signature is

successfully verified if said first hash value matches said first computed hash value (column 12,

lines 16 – 18 where successful matches for counterparty values is achieved).

For claim 8, US '616 teaches:

The method of claim 1 wherein (f) includes decrypting a portion of said second certificate to

recover a second hash value (see column 12, lines 37 – 40).

For claim 9, US '616 teaches:

The method of claim 8 wherein (f) also includes computing a hash of at least a portion of said

second certificate to produce a second computed hash value (see column 12, lines 40 – 44).

For claim 10, US '616 teaches:

The method of claim 9 wherein said second hash value is compared to said second computed hash value (see column 11, lines 31 – 34).

For claim 11, US '616 teaches:

The method of claim 10 further including successfully verifying said second digital signature if said second hash value matches said second computed hash value (see column 12, lines 16 – 18).

As it relates to claim 12, US '616 teaches:

A method of establishing a secured communication session across a remote network connection, comprising:

(a) receiving first and second certificates that include first and second digital signatures, respectively , said second certificate including at least a portion of said first certificate (see column 9, lines 39 and 54 – 55; Figure 5, item 55);

(b) obtaining first and second public keys (see Figure 5 and column 9, line 61);

(c) using the first public key to verify the first digital signature (see column 9, lines 39 and 61);

(d) if the first digital signature in (c) is successfully verified, verifying the second digital signature; and (e) permitting the communication session to occur if both said first and said second digital signatures are successfully verified (see column 9, lines 54 - 55 and 60).

For claim 13, US '616 teaches:

The method of claim 12 wherein said first and second digital signatures are signed with different private keys (see column 16, lines 66 – 67 and column 17, lines 1 – 5).

For claim 15, US '616 teaches:

The method of claim 12 wherein (c) includes using said first public key to decrypt a portion of said first certificate to recover a first hash value (see column 2, line 64).

For claim 16, US '616 teaches:

The method of claim 15 wherein (c) also includes computing a hash of at least a portion of said

first certificate to produce a first computed hash value (see column 12, lines 40 – 44).

For claim 17, US '616 teaches:

The method of claim 16 wherein (c) includes comparing said first hash value to said first

computed hash value (see column 11, lines 31 –34).

For claim 18, US '616 teaches:

The method of claim 17 wherein (c) further includes determining that said first digital signature is

successfully verified if said first hash value matches said first computed hash value (see column

12, lines 16 – 18).

For claim 19, US '616 teaches:

The method of claim 12 wherein (c) includes decrypting a portion of said second certificate to

recover a second hash value (see column 12, lines 37 – 40).

For claim 20, US '616 teaches:

The method of claim 19 wherein (c) also includes computing a hash of at least a portion of said

second certificate to produce a second computed hash value (see column 12, lines 40 – 44).

For claim 21, US '616 teaches:

The method of claim 20 wherein (c) includes comparing said second hash value to said second

computed hash value (see column 11, lines 31 – 34).

For claim 22, US '616 teaches:

The method of claim 21 further including successfully verifying said second digital signature if

said second hash value matches said second computed hash value (see column 12, lines 16 –

18).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 23 – 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Tycksen, Jr.

et al. in US Patent 6,189,097 B1 (hereinafter US '097).

As it relates to claim 23, US '097 teaches:

A method of creating a remotely verifiable certificate (see column 3, line 38), comprising:

(a) retrieving a first signed certificate (see column 4, line 12 and Figures 1 and 7);

(b) combining together said first signed certificate with other values (see Figures 1 and 3);

(c) computing a hash of the combination from (b) (see column 5, lines 52 – 53); and

(d) signing said hash from (c) with a private key (see Figure 7 and column 9, lines 35 – 52).

For claim 24, US '097 teaches:

The method of claim 23 wherein said other values in (b) includes an IP address (see column 13,

lines 22 – 23; where a digital certificate can carry a number of components; and see column 6,

lines 65 – 66; where it is inherent that if a digital certificate can be stored on a personal

computer (PC) it will contain that PC's IP address).

For claim 25, US '097 teaches:

The method of claim 23 wherein said other values in (b) includes a domain name (see column

13, lines 22 – 24 and column 6, line 47; where a website component is equivalent to a domain

name).

5.   Applicant's arguments with respect to the rejections of claims 26 and 32 - 35 under 102

(b) and claims 27 – 31 under 103(a) have been fully considered and are persuasive. Therefore,

the rejections have been withdrawn. However, upon further consideration, new grounds of

rejections are made in view of a different interpretation of previously applied references.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 26 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Tycksen, Jr. et al in US Patent No. 6189097 (hereinafter US '097) and further in view of Sudia in

US Patent No. 5659616 (hereinafter US '616).

7.   As it pertains to claim 26, US '097 teaches:

A computer, comprising:

a processor ; and

a memory coupled to said processor; (see column 1, line 4 and 10; column 7, line 61: where it is

inherent that a computer has memory and a processor) and teaches storage of a certificate (see

column 8, lines 36 – 37) *but does not explicitly* state storage for a first certificate and a second

certificate, said second certificate derived from said first certificate.

Sudia however does teach wherein said memory includes storage for a first certificate

and a second certificate, said second certificate derived from said first certificate (see 616:

column 9, line 39 and 54 – 55; Figure 5, item 55).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to have known that the digital certificates as taught by Sudia could be initialized as disclosed by

Tycksen et al., since they both teach use of a digital certificate within the same field of endeavor

(trusted digital communication) and with the same problem sought to be solved (verifying digital communication).

For claim 27, US '097 shows a computer system wherein said processor combines at least a portion of said first certificate with additional values, computes a hash of said combination, and encrypts said hash with a private key (see column 2, lines 49 – 55).

For claim 28, US '097 shows a computer system wherein said additional values include an IP address (see column 13, lines 22 – 24 and column 6, lines 65 – 66).

For claim 29, US '097 shows a computer system but does not teach wherein said additional values include a domain name (see column 13, lines 22 – 24 and column 6, line 47).

For claim 30, US '097 shows a computer system wherein said first certificate includes a serial number (see Figure 1, item 11a).

For claim 31, US '097 shows a computer system wherein said first certificate is not created by the server (see Figure 3, item 102 and column 7, lines 59 – 62).

As it relates to claim 32, US '097 teaches:

A client system, comprising:

a processor; and

a memory coupled to said processor; and

a connection to a communication link to a server; (see column 1, line 4 and 10; column 7, line 61; column 5, lines 3 – 4)

but does not disclose wherein said processor requests a first certificate from the server, verifies a first digital signature associated with said first certificate, and if said first digital signature is successfully verified, requests a second certificate from said server and verifies a second digital signature associated with said second certificate;

wherein said second certificate includes at least a portion of said first certificate.

Sudia however does teach wherein said processor requests a first certificate from the server, verifies a first digital signature associated with said first certificate, and if said first digital signature is successfully verified, requests a second certificate from said server and verifies a second digital signature associated with said second certificate; wherein said second certificate includes at least a portion of said first certificate (see Figure 5; column 9, lines 38 – 39, 54 – 55 and 60 – 61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have known that the digital certificates as taught by Sudia could be initialized as disclosed by Tycksen et al., since they both teach use of a digital certificate within the same field of endeavor (trusted digital communication) and with the same problem sought to be solved (verifying digital communication).

For claim 33, US '097 teaches:

The client system of claim 32 wherein the client uses two different public keys to verify the first and second digital signatures (see column 2, line 19).

As for claim 34, US '097 teaches:

A client system, comprising:

a processor;

a memory coupled to said processor; and

a connection to a communication link to a server; (see column 1, line 4 and 10; column 7, line 61; column 5, lines 3 – 4) *but does not disclose* wherein said processor requests a first certificate and a second certificate from the server, verifies a first digital signature associated with said first certificate, and if said first digital signature is successfully verified, verifies a second digital signature associated with said second certificate; wherein said second certificate includes at least a portion of said first certificate.

Sudia however does teach wherein said processor requests a first certificate and a second certificate from the server, verifies a first digital signature associated with said first certificate, and if said first digital signature is successfully verified, verifies a second digital signature associated with said second certificate; wherein said second certificate includes at least a portion of said first certificate (see Figure 5; column 9, lines 38 – 39, 54 – 55 and 60 – 61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have known that the digital certificates as taught by Sudia could be initialized as disclosed by Tycksen et al., since they both teach use of a digital certificate within the same field of endeavor (trusted digital communication) and with the same problem sought to be solved (verifying digital communication).

For claim 35, US '616 teaches:

The client system of claim 34 wherein the client uses two different public keys to verify the first and second digital signatures (see column 2, line 19).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Apperson et al. in US Patent No. 5978484 discloses ideas parallel to applicant's claimed invention (see Figure 4 and column 6, lines 35 – 48).

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurel Lashley whose telephone number is 571-272-0693. The examiner can normally be reached on Monday - Thursday, alt Fridays btw 7:30 am & 5 pm.
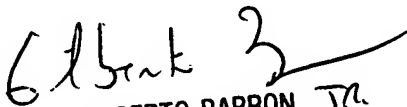
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, Jr. can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laurel Lashley
Examiner
Art Unit 2132

01 March 2006
LLL

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